AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1.(original) A method for controlling a primary current in an ignition coil of an internal combustion engine with controlled ignition, in which the current is established in an inductive primary circuit over a given duration, referred to as the conduction time and determined by calculation and/or as a function of measurements carried out in the primary circuit, characterized in that the conduction time is calculated according to the following steps:
- predetermining the predetermined conduction time (td $_i$),
- carrying out at least one measurement of the current (Ic $_i$) in the primary circuit at an instant (t $_i$) lying in the last tenth of the predetermined conduction time (td $_i$),
- estimating the current (If $_i$) at the end of the predetermined conduction time (td $_i$), as a function of the measurement(s) carried out,
- optionally correcting the conduction time (td $_i$) for the ignition cycle during which the last current measurement was carried out, as a function of the previous estimate and the current (I$_{target\ i}$) desired at the end of the conduction time.

2.(original) The control method as claimed in claim 1, characterized in that the predetermined conduction time (td $_i$) is obtained on the basis of tables stored in a management and control device (16) of the ignition coil, as a function of parameters such as in particular the potential difference (V) applied to the terminals of the primary circuit.

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3. (currently amended) The control method as claimed in ~~one of claims 1 and 2~~ claim 1, characterized in that the estimation of the current (If $_i$) at the end of the predetermined conduction time (td $_i$) is carried out on the basis of a measurement by linear extrapolation.

4. (currently amended) The control method as claimed in ~~one of claims 1 to 3~~ claim 1, characterized in that the estimation of the current (If $_i$) at the end of the predetermined conduction time (td $_i$) is carried out by linear extrapolation of the measurement carried out, by forming an average with measurements taken previously.

5. (original) The control method as claimed in claim 4, characterized in that a moving average of the estimated final current is formed.

6. (currently amended) The control method as claimed in ~~one of claims 1 to 5~~ claim 1, characterized in that the correction of the conduction time is carried out linearly as a function of the final current, whether or not it is averaged.

7. (currently amended) The control method as claimed in ~~one of claims 1 to 6~~ claim 1, characterized in that the desired final current ($I_{target\ i}$) is determined as a function of the speed (N) of the engine in question.